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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,036	01/11/2001	Ekkchard Leberer	38005-0126	8288
29180	7590	01/25/2006	EXAMINER	
BELL, BOYD, & LLOYD LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			JOIKE, MICHELE K	
			ART UNIT	PAPER NUMBER
			1636	
DATE MAILED: 01/25/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 09/758,036	Applicant(s) LEBERER ET AL.	
	Examiner Michele K. Joike, Ph.D.	Art Unit 1636	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 05 January 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☒ The Notice of Appeal was filed on 07 July 2005. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See continuation sheet. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: 1-10, 20, 21 and 25.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See continuation sheet.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
 13. ☐ Other: _____.


 DAVID GUZZI
 PRIMARY EXAMINER

Continuation of 3. Applicant's amendment after final has not been entered because the amendment requires a new search and consideration. Specifically, Applicant has added the limitation "and which is not complemented by an expressed HERG1" to claims 1, 10 and 21. This limitation has not been previously searched. Therefore, this limitation requires a new search and consideration with regard to the patentability of the application. Because this limitation requires a new search and consideration, and because prosecution on the merits is closed, the After Final amendment is not entered.

Continuation of 11. Applicant's arguments regarding the withdrawal of the rejection of claims 1-10, 20, 21 and 25 under 35 USC 103(a) are not found persuasive and are addressed below.

Applicant presents the following arguments:

1. Gaber teaches a single mutant that is equivalent to the double mutant so there is no suggestion or motivation for making a third mutant.
2. Fairman et al teach that TRK1 and TRK2 are dominant channels and TOK1 is a passive channel, therefore TRK1 and TRK2 overshadow TOK1, so there is no motivation to use a TOK mutant.
3. Tang et al do not teach a triple mutant.
4. The mutants of Fairman et al are too fragile and would teach away from mutating it further.
5. There is no reasonable expectation of success for obtaining expression of a potassium channel in a triple mutant; there is no reasonable expectation of success that complementation would occur; and certain human channels do not complement the double mutant.
6. Tang and Rampe do not cure the deficiencies of Gaber, Fairman and Ketchum.

Applicant's arguments are not persuasive for the following reasons:

1. It is agreed that Gaber does not teach a triple mutant, Fairman et al teach the triple mutant.
2. Fairman et al teach a triple mutant of TRK1, TRK2 and TOK1, therefore they made and used a TOK1 mutant.
3. Fairman et al teach the triple mutant.
4. There is no evidence that the TRK1, TRK2 and TOK1 mutant is too fragile in Fairman et. al; there is no teaching away from mutating it further.
5. Although according to applicant, certain human channels do not complement double mutants, it is clear that not all heterologous potassium ion channels have such trouble complementing the double deletion phenotype. This is evident from Tang et al, which indicates that the gplRK1 gene complements the double deletion strain. Therefore, one of ordinary skill in the art would have a reasonable expectation of success expressing gplRK1 in the triple deletion. In Takekawa, a triple deletion was provided to allow for a complementation of a phenotype by a heterologous gene.
6. First, applicant did not argue any deficiencies in Ketchum. Second, as discussed above, there are no deficiencies in Fairman et al and Gaber to be overcome.